

## Notes on Some Little Known Species of Notodontidae (Lepidoptera) from Korea, with Description of a New Genus and a New Species

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**Abstract** Faunistic and some taxonomic data for 17 little known Korean species of Notodontidae are given: three species (*Harpyia tokui* Sugi, *Drymonia japonica* Wileman, and *P. jesoensis* Matsumura) are new to Korean Peninsula and three other species (*Hemifentonia mandschurica* Oberth., *Dicranura ulmi tsvetaeui* Schintlmeister et Sviridov, and *Nerice leechi* Staudinger) new to South Korea. A new genus *Lophontomira* based on type species, *Lophontomira parki* sp. nov. is described. *Dicranura tsvetaeui* Schintlmeister et Sviridov is proposed as a subspecies of *D. ulmi* Denis et Schiffermüller. Male genitalia of some species are also illustrated.

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**Key words** Lepidoptera, Notodontidae, *Lophontomira*, Korea, faunistics.

### INTRODUCTION

For the last thirty years contributions to knowledge on Korean Notodontidae have been made by Pak (1959), Nam (1982), and Witt (1985), Schintlmeister (1989), and *et al.*, but most of these data were dealt together with other Lepidopteran groups in various taxonomic and faunistic papers. Among them, the most comprehensive work is Witt (1985), which was based on the material originally collected by Hungarian entomologists in North Korea. Schintlmeister (1989) subsequently summarized most of the Korean data dispersed in various literatures for his faunistic outline of Korean Notodontidae, where 86 species were recognized in the Korean Peninsula (mainly from North Korea), including 4 species considered doubtful. According to a recent work by Jaros *et al.* (1992), the total number of known Korean Notodontidae are 89 species so far. During May-June of 1993, the first author had an opportunity to visit Korea, and examined Macrolepidoptera including Notodontidae preserved in the following scientific institutions : Center for Insect Systematics, Kangwon National University, Chuncheon (mentioned below as CIS); Agricultural Science Institute and Technology, Suwon (ASIT); Forest Research Institute, Seoul (FRI); College of Agriculture and Life Science, Seoul National University, Suwon (SNU).

As a result of this study, a new species of a newly proposed genus, *Lophontomira parki*; **gen. et sp. nov.**, is described and three species of Notodontidae are recognized as new to Republic of Korea and further three species previously unknown from Korean Peninsula are recognized. Based on all available previous publications, Korean Notodontidae are comparatively studied. Compared to other groups, it became clear that known fauna are far from complete. Some of newly recorded species were previously known only from Primorye Territory and Japan, or were described recently from Tsushima Island. Thus, it can be easily predicted the increasing of the number of Korean Notodontidae with many of the East Palearctic species viz., *Hagapteryx admirabilis* Stg., *Notodonta stigmatica* Mats., *Odontosia patricia* Stich. and *O. sieversi* Men., which known so far from the same adjacent regions or treated until now as endemic in Japan. For example, *Nephodonta tsushimensis* Sugi were also recently described from Tsushima Island, *Pheosiopsis olivacea* Mats. and others. Also some Notodontid-moths distributed in China are probably found in the Korean Peninsula. This paper is the first part of the series dealing with Notodontidae of the Korean fauna, and aims to record new faunistic data on Korean Notodontidae and to revise some of taxonomic status given by previous authors. Abbreviations for provinces in Korea: GW- Gwangwon-do; GG- Gyeonggi-do; GN- Gyeongsangnam-do; JN- Jeonnam-do.

## SYSTEMATIC ACCOUNTS

### *Lophontomira* Tshistjakov & Kwon, **gen. nov.**

Type species : *Lophontomira parki* Tshistjakov & Kwon, sp. nov.

*Adult.* Eyes naked; antennae shortly bipectinate in male, length of pectinations being gradually decreased towards apex; proboscis vestigial, but clearly visible; labial palpi short, relatively stout, squamous; 3rd segment minute and pointed apically. Vesture of head and thorax not so shaggy, without thoracic crest. Abdomen moderately long and extends beyond hindwing, covered with scarce. Forewing nearly triangular, somewhat elongate; apex obtuse; termen slightly sinuate; hindmargin with well developed triangular scaletigt medially. Venation of forewing with narrow accessory cell (areole) between common stem  $R_{1+5}$  and  $M_1$ ;  $R_{1+5}$  arising from costal margin of discal cell, before its upper angle;  $R_2$  diverging from  $R_{3+5}$  before  $R_5$ ;  $M_1$  arising from upper angle of discal cell, then stalked for a short distance with  $R_{1+5}$ , forming very narrow accessory cell;  $M_2$  from just above middle of discoidal vein; discoidal vein concave;  $M_3$  and  $CuA_1$  well separated. Hindwing with  $R_s$  and  $M_1$  stalked about distal  $1/3$ ;  $CuA_2$  arising from before lower angle of cell.

*Male genitalia.* Uncus short, triangular at basal part and strongly bifurcated distally: socii almost equal to uncus in length, slightly indented on apex; lobes of tegumen rather wide, nearly elliptical; valvae weakly sclerotized, somewhat swollen distally, narrow at basal half and nearly quadrate at apical half, with slightly prominent rounded apex at upper angle; base of costa with a large lobe slightly bent caudally by its distal part and resembling valvae (this lobe covers the most part of inner surface of valvae); juxta membranous, trapezoidal medio-ventral area and nearly quadrate in distal part. Aedeagus almost straight, somewhat conical, gradually dilated towards triangular pointed apex; vesica slender one or two falling out cornuti, slightly curved long spines with swollen bases; 8th abdominal sternite elongate, with deep tongue-like

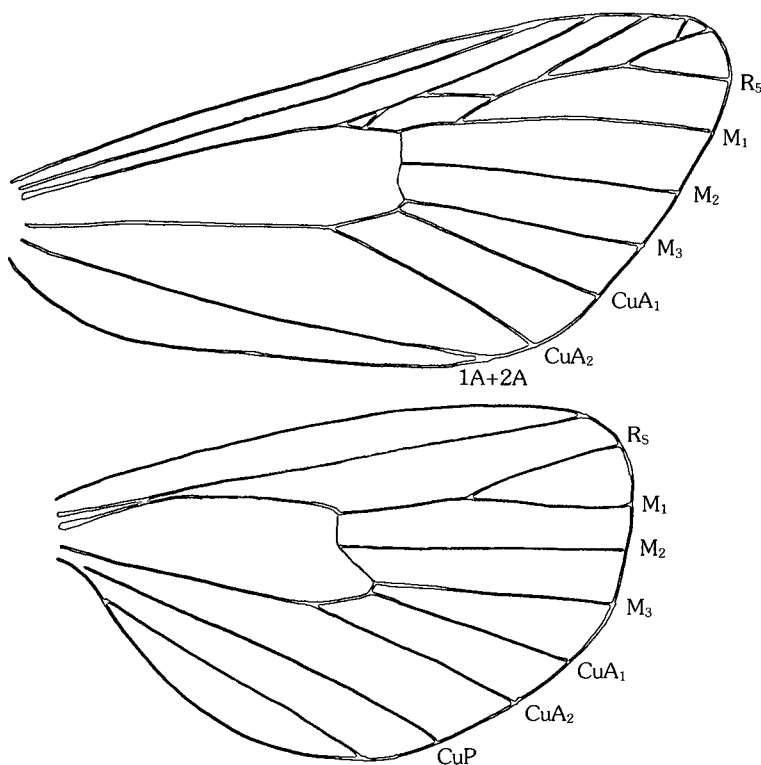


Fig. 1. Venation of *Lophontomira parki* sp. nov.

incision on caudal margin.

**Diagnosis.** This is an unique genus, closely resembles *Lophontosia* Staudinger, but differs by following features: proboscis somewhat longer; fectins of antenna shorter, no more then 3 times longer than segment's diameter, while those of *Lophontosia* about 5 times; abdomen extends beyond hindwing (scarcely reaches to its edge in *Lophontosia*); discoidal vein concave,  $M_3$  and  $CuA_1$  well separated;  $R_s$  and  $M_1$  of hindwing stalked for shorter distance. Male genitalia are similar to those of *Lophontosia* in the structure of valva, but quite differs by its uncus which somewhat resembling that of *Spatalina* Bryk. On the other hand, it shows some similarity with *Ptilodon* Hübner in the structure of valva, too.

**Ethymology.** The generic name is originated from the combination of the known generic name, "*Lophontosia*" and Latin word "mira", meaning whimsical or quaint *Lophontosia*. Gender is feminine.

*Lophontomira parki* Tshistjakov & Kwon, sp. nov. 작은갈색채주나방(新稱)  
(Figs 2, 10)

**Diagnosis.** Superficially this new species is similar to *Lophontosia cuculus* Staudinger, but easily separable by the smaller size, relatively longer abdomen extending beyond hindwing and paler chocolate brown tone of the forewing.

**Adult.** Length of forewing 14mm. Palpus, frons, patagia, tegula and thorax pale chocolate brown,

mingled with greyish hairs; abdomen greyish above and light-greyish below. Forewing pale chocolate brown, darker along costal margin and at basal area. Ante- and postmedian lines dark chocolate, serrate, usually ill-defined below costa, sometimes obscure, displaced similar to that of *Lophontosia*; antemedian line slightly curved from costa to hind margin of discal cell, running obliquely inwards below  $CuA_1$  then angled outwards at  $CuP$  and ending on inner side of tuft; postmedian line obscure from costa to  $M_3$ , defined by pale stria, incurved to vein  $M_3$ , then being distinct and running obliquely inwards to outer side of tuft; subterminal line indistinct, represented by some dark, minute strokes at tornus; terminal line very slender; reniform obscure, represented by loose pale spot at upper angle of discal cell; tuft of scales on inner margin and cilia concolorous with ground colour of forewing. Hindwing paler, with a patch at anal angle, similar to that of *Lophontosia*, but white streaks shorter, dark chocolate scales from its inner and outer sides not so abundant, occupy only narrow space adjoining to white streaks. Undersurface of forewing pale greyish brown, darker at basal half, which bordered by fuscous band from outer half and with four whitish streaks along costa near tornus. Undersurface of hindwing concolorous with outer half of forewing, postmedian fascia fuscous, crossing obscurely dark discal spot. Female is unknown.

Male genitalia. As described for genus.

*Material examined.* Holotype: 1 ♂, Chuncheon, GW, Korea. 21. VII. 1992 (K.T. Park et B.K. Byun). Paratypes: 1 ♂, with the same data as holotype; 1 ♂, Bongmyung-ri, Chuncheon GW, Korea, 23. VII. 1992 (K.T. Park et B.K. Byun). Types are deposited in CIS.

*Distribution.* Korea (South).

*Remarks.* This new species is named in honor of Professor K. T. Park, whose tireless activity in the research of the Korean lepidopteran fauna made possible to find such a rare and curious moth.

### *Harpyia tokui* (Sugi, 1977) 끝검은재주나방 (新稱)

(Figs 3, 16-17)

*Hybocampa tokui* Sugi, 1977, Kontyû, 45: 9, fig. 1.

*Diagnosis.* Wing expanse, 47 mm in male. Antenna in male bipectinate before 1/4 length, then threadlike. Forewing greyish brown, with a large wedge-shaped blackspot below costa. Hind marginal area suffused with dark grey to postmedian line. Forewing and hindwing somewhat wider than those of *H. umbrosa*. In male genitalia, uncus large, width broader than length; valva strongly bent ventrally, with well developed internal process; juxta more widely rounded than that of *H. umbrosa*; aedeagus cylindrical, moderate in length.

*Material examined.* 1 ♂, Sogumgang, Yangyang, GW, 23. V. 1988 (K.T. Park), CIS.

*Distribution.* Korea (South), Japan, Russian Far East.

*Remark.* This species was previously known from Tsushima Island, Japan (Sugi, 1977) and from South Primorye (Tshistjakov, 1977), from where it was recorded as *Hybocampa monochroma* almost simultaneously with *H. tokui* (Sugi, 1977). Here it is recorded for the first time from the Korean Peninsula. The finding of this species in Korea serves as a link between both localities, mentioned above.

*Drymonia japonica* (Wileman, 1911) 흰줄두점재주나방 (新稱)  
(Figs 4, 18-19)

*Ochrostigma japonica* Wileman, 1911, Trans. Ent. Soc. Lond., 1911: 285, pl. 30: 25.

*Diagnosis.* Wing expanse, 36 mm in male. Ground colour of forewing greyish brown, *outer line* with two black spots; apex more rounded than that of *D. dodonides*.

Male genitalia. Uncus well developed, with rounded distal margin; valva concave at apex, with two narrow and long projections basally; aedeagus stout.

*Material examined.* 1 ♂, Mt. Gyeong-bang-san, GW, 2. VIII. 1988 (K.T. Park), CIS; 6 ♂, Gwangjeung, GG, 31. V. 1986 (K.T. Park & U. Park), CIS; 1 ♂, Mt. Odae-san, GW, 6. VIII. 1986 (K.J. Won), FRI; 1 ♂, same locality. 10. VI 1988 (K.J. Won), FRI.

*Distribution.* Korea (South), Japan, Russian Far East.

*Remarks.* This species was previously known from Japan (Sugi, 1982) and South Primorye (Tshistjakov, 1985). Here it is recorded for the first time from the Korean Peninsula. The finding of this species in Korea serves as a link between both localities, mentioned above.

*Ptilophora jesoensis* (Matsumura, 1920) 깃털수염재주나방 (新稱)  
(Figs 5, 20-21)

*Ptilophoroides jesoensis* Matsumura, 1920, Zool. Mag. Tokyo, 32: 150.

*Diagnosis.* Wing expanse 33 mm in male. Antenna featherlike in male, threadlike in female. Forewing greyish brown, *outer line* curved to hind margin; outer and hind margins of forewing and hindwing with short hairs.

*Material examined.* 16 ♂, 9 ♀, Gwangjeung, GG, 5. XI. 1984, 31. X- 21. XI. 1985 (K.J. Won), FRI

*Distribution.* Korea (South), Japan, Russian Far East.

*Remarks.* This species was previously known from Primorye Territory (Tshistjakov, 1979) and Japan (Sugi, 1982). This is the first record from the Korean Peninsula.

*Hemifentonia mandschurica* (Oberthür, 1911) 만주재주나방

*Drymonia mandschurica* Oberthür, 1911, Et. Lép, Comp., 5(1): 323.

*Material examined.* 1 ♂, Gwangjeung, GG, 20. VII. 1986 (K.J. Won), FRI.

*Distribution.* Korea (South, North), Russian Far East.

*Remarks.* This species was previously known from Primorye Territory (Tshistjakov, 1984; Schintlmeister *et al.*, 1987) and North Korea (Schintlmeister, 1989). Here it is recorded for the first time from South Korea.

***Dicranura ulmi tsuetaevi* Schintlmeister et Sviridov, 1986, stat. n. 갈색테재주나방 (新稱) (Figs 6, 12-13)**

*Dicranura tsuetaevi* Schintlmeister et Sviridov, 1986, Vestn. Zool., no. 6.

**Diagnosis.** Wing expanse, 37 mm in male. Ground colour of forewing blackish brown; Width of forewing relatively narrow at middle. Male genitalia: uncus short, narrowed basally distal margin rounded, with numerous short hairs distally, tegumen slightly narrowed toward distal end, with a elongated strong projection laterally; valva expanded, rather narrower beyond basal half, rounded terminally; sacculus well sclerotized, broad at base, then reaching to nearly apex of valva; aedeagus stout, moderate in length, with well-developed sclerotized part in vesica, sharpened apically.

**Material examined.** 2 ♂. Gwangleung, GG, 4. V. 1986, 2. V. 1987 (K.J. Won), FRI.

**Distribution.** Korea (South, North), North-East China, Russian Far East.

**Remarks.** This species was previously known from Primorye Territory (Schintlmeister *et al.*, 1987), North-East China (Schintlmeister, 1991), and North Korea (Jaros *et al.*, 1992). Here it is recorded for the first time from South Korea. A comparative study of the series specimens of *D. ulmi* Dennis et Schiffermüller from East Europe, Transcaucasia and Turkmenistan with a recently described its Fareastern vicariant, *D. tsuetaevi* (Schintlmeister and Sviridov, 1985) showed that the characters are rather variable. Monotonous colouration of the forewings of *D. tsuetaevi*, as it was pointed out in its description, is very similar to that of *D. ulmi* from Turkmenistan, and especially well-marked specimens from Transcaucasia (Azerbaijan). It should be marked, nearly the same monotonous grey, almost without pattern on forewings have about 1/3 of observed specimens from Primorye Territory and Korea. The differences in the colouration of the hindwings (white for *tsuetaevi* and somewhat greyish for *ulmi*) are more steady, but even in that case some specimens from the Far East have dark veins, clearly visible for their whole length, such as in *ulmi*. Male genitalia of the specimens from the Far-East rather differ from those of the Westpalaearctic specimens by the shape of uncus only. All other differences, mentioned by authors, are mixed and presented in the representatives of the both populations: the shape of aedeagus varies from slightly curved (more typical for *tsuetaevi*) to strongly curved (more typical for *ulmi*); coecum well developed within both taxa, but not only in *ulmi*, as it was pointed out in its diagnosis; cornuti, which were pointed out as typical for *tsuetaevi* only, actually have been found in Westpalaearctic specimens also. So, all these differences between both taxa under discussion are not so essential and easily go into limits of geographical mutability of one species. For this reason, we treat *tsuetaevi* as Fareastern subspecies of amphipalaearctic species *ulmi*.

***Nerice leechi* Staudinger, 1892 두톱니재주나방**

*Nerice leechi* Staudinger, 1892, in Mém. Roman., 6: 348.

**Material examined.** 1 ♀, Sogumgang, GW, 8. VIII 1988 (K.T. Park), CIS; 2 ♀, Weoljeongsan, Mt. Odae-san, GW, 8. VII 1923 (T. Kurisue et S. Maruta), ASIT.

*Distribution.* Korea (South, North), China, Russian Far East.

*Remarks.* This species was previously known from Khabarovskii region, Primorye Territory, Sakhalin Island (Tshistjakov, 1979, 1985), North-East China (Cai, 1979, 1982; Schintlmeister, 1991) and North Korea (Jaros *et al.*, 1992). Here it is recorded for the first time from South Korea.

*Peridea jankowskii* (Oberthür, 1879) 양코스키재주나방

*Notodonta jankowskii* Oberthür, 1879, Diagn. Espèces nouv.: 11.

*Material examined.* 2 ♂, 1 ♀, Gwangelung, GG, 4. VII. 1980 (K.J. Won), FRI; same locality, 26. VII, 8. VIII. 1987 (K.J. Won), FRI.

*Distribution.* Korea (South, North), North-East China and Russian Far East.

*Remarks.* This species was previously known from the Korean Peninsula (Kyeong-seong, correct present locality is Seoul), under a subspecific name, *varidens* (Bryk, 1948).

*Besaia pallida* (Butler, 1877) 작은점노랑재주나방

*Bireta pallida* Butler, 1877, Ann. Mag. nat. Hist., (4) 20: 473

*Material examined.* 1 ♂, Gwangleung, GG, 23. VI. 1987 (K.J. Won), FRI.

*Distribution.* Korea (South), Japan.

*Remark.* This species was previously known from Korea (Nam, 1982), but it subsequently was pointed out as doubtful for its fauna (Schintlmeister, 1989). However, we examined one specimen in very good condition, which is undoubtedly belongs to *B. pallida*.

*Peridea moltrechti* (Oberthür, 1911) 남방재주나방

*Notodonta moltrechti* Oberthür, 1911, Et. Lép. Comp., 5(1): 322, pl. 65, fig. 627.

*Material examined.* 2 ♂, Mt. Odaesan, GW, 6. VIII. 1989 (K.T. Park), CIS; 1 ♂, Yongpyong, GW, 1. VIII. 1991 (K.T. Park), CIS; 1 ♀, Hweanggye, GW, 1. VIII. 1991 (K.T. Park), CIS.

*Distribution.* Korea, North and North-East China, Russian Far East.

*Remarks.* This species was recently recorded from Korea by Shin (1990), based on a single specimen from Mt. Kwangduk-san (GW).

*Neodrymonia delia* (Leech, 1889) 노린재나무재주나방  
(Fig. 7)

*Drymonia delia* Leech, 1889, Proc. Zool. Soc. Lond., 1888: 640, t. 32, f. 3.

*Material examined.* 2 ♀, Mt. Keum-san, Namhae, GN, 24. VII. 1985 (K.T. Park), CIS; 1 ♂, Mt. Baekun-san, near Suncheon, JN, 22. VI 1988 (J.H. Lee), SNU; 1 ♂, Mt. Jirisan, JN. 20. VII. 1981 (S. K. Lee), SNU.

*Distribution.* Korea (South, North), Japan, China.

*Remarks.* In a Korean literature (Nam, 1982), this species erroneously cited with *Neodrymonia coreana* Mats. The photos in his paper (Abb. 6: 3, 4) show the specimens of *N. delia* from Japan, but not of native origin. The record of this species from Korea by Schintlmeister (1989) was probably based on the data of the previous author, without any reference to observed material. Therefore, a photo of this species from Korea are provided.

### ***Hagapteryx mirabilior* (Oberthür, 1911) 남방섬재주나방**

*Lophopteryx mirabilior* Oberthür, 1911, Et. Lép. Camp., 5(1): 324.

*Hatapteryx kishidai* Nakamura, 1978, Tinea, 10: 213, fig. 1.

*Material examined.* 5 ♂, Gwangleung, GG, 10. VIII. 1985 (K.T. Park); 1 ♂, Mt. Baekun-san, near Suncheon, JN, 25. VI. 1991 (S.B. Ahn).

*Distribution.* Korea (South), Japan, China and Russian Far East.

*Remarks.* Not so long time ago, it was described erroneously from Tsushima Island as a new species *kishidai* (Nakamura, 1978). After that, it has been recorded under the name from the mainland of Japan (Sugi, 1979), China (Cai, 1982), Primorye Territory (Tshistjakov, 1988) and North Korea (Jaros *et al.*, 1992), and South Korea (Shin, 1992). The *kishidai* Nakamura was synonymized with *mirabilior* by Schintlmeister (1991).

### ***Togapteryx velutina* (Oberthür, 1880) 세로줄재주나방**

*Drymonia velutina* Oberthür, 1880, E'tudes d'Ent., 5: 64, pl. 8: 2.

*Material examined.* 1 ♂, Mt. Odae-san, GW, 31. VII. 1988 (K.J. Won), FRI.

*Distribution.* Korea (South), Japan, China and Russian Far East.

*Remarks.* This species was previously recorded from Korea (Schintlmeister, 1991), but without any references on the observed material. We includes this species in the list, based on a specimen found in the collection.

### ***Himeropteryx miraculosa* Staudinger, 1887 띠노란재주나방**

*Himeropteryx miraculosa* Staudinger, 1887, in Rom. Mém. Lépid., 3: 228, pl. 12: 10.

*Material examined.* 1 ♀, Mt. Samak-san, GW, 20. X. 1989 (K.T. Park), CIS; 3 ♂, Gwangleung, GG, 21. X. 1985 (K.J. Won), FRI.



*Distribution.* Korea (South, including Jeju Is.), Japan, China, Taiwan and Russian Far East.

*Remarks.* This species was recorded from Korea (Schintlmeister, 1991), but without references on the observed material. Herein we included this species in the list, based on the several specimens found in the collection.

*Hiradonta takaonis* Matsumura, 1924 골뚝재주나방

*Hiradonta takaonis* Matsumura, 1924, Tr. Sapporo Nat. Hist. Soc., 9: 36.

*Material examined.* 2♀, Kwangleung, GG, 10. VII. 1990 (K.T. Park), CIS; 3♂, Seomyun, Yangyang, GW, 26. VI. 1987 (K.T. Park), CIS; 1♂, Mt. Naejangsan, JN. 11. VI. 1975 (J.Y. Shim), ASIT.

*Distribution.* Korea (South), and Japan.

*Remarks.* The data on the occurrence of this species in Korea (Kiriakoff, 1967; Schintlmeister, 1989) based on the records published by Pak (1959), Nam (1982). Nevertheless Schintlmeister (1991) pointed out that these data need to be confirmed by current material in his outline. The specimens examined undoubtedly belong to this species.

*Phalera takasagoensis* Matsumura, 1919 참가지재주나방 (新稱)

(Figs 8, 14-15)

*Phalera takasagoensis* Matsumura, 1919, Zool. Mag. Tokyo, 31: 79.

*Diagnosis.* Wings expanse, in female 53mm. Ground colour of forewing greyish brown with yellowish spot at apex, very similar to that of *Ph. assimilis*, but generally smaller.

*Female genitalia.* Ductus bursae short and thick, corpus bursae membranous, with V-shaped signum.

*Material examined.* 2♀, Mt. Daeam-san, near Yanggu, GW, 26. VII. 1987 (K.T. Park), CIS; 1♂, Chugok, 20km N Chuncheon, GW, 30. VII. 1986 (K.T. Park), CIS.

*Distribution.* Korea (South), Japan, Taiwan, Russian Far East.

*Remarks.* This species was previously recorded from Korea (Schintlmeister, 1991), but no reference on material from this region has been found. Our identification of this species was based on the examination of the characters of its male genitalia.

*Phalera minor* Nagano, 1916 붉은머리재주나방

(Figs 9, 11)

*Phalera minor* Nagano, 1916, Bull. Naw. Ent. Lab., 1: 7, pl. 2, figs 1-5, pl. 9.

*Material examined.* 1♀, Jeju, 1. IX. 1975 (H.S. Kim), ASIT; 3♂, Hweongseong, GW, 25. VII. 1984 (K.J. Won), FRI.

*Distribution.* Korea (South, including Jeju Is.), Japan, China.

*Remarks.* It was previously reported from Korea by Pak (1959) and, according to this data, also was cited for Korea in the outline of the Palaearctic Notodontidae (Kiriakoff, 1967). But all such previous records seems to be based on misidentification. The photo of *Ph. minor* from Korea by Nam (1982: 579, 833, Pl. 79: 675) is certainly *Ph. angustipennis* according to his photo. Nevertheless A. Schintlmeister (1989) suggested that this species probably occurs in Korea, because it has been known in China (Province Hunan). Herein we reconfirmed the occurrence of this species in Korea, based on the examination of the female genitalia of a specimen.

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## 한국산 재주나방科 (나비目)의 1新屬 및 1新種, 3未記錄種과 몇몇 주요種들에 대한 분류학적 검토

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한국산 재주나방科를 정리한 결과 1新屬 및 1新種 (*Lophontomira parki* sp. nov.)을 기재하고, 한반도 未記錄種 3種 (*Harpyia tokui* Sugi, *Drymonia japonica* Wileman, *P. jesoensis* Matsumura), 남한 未記錄種 3種 (*Hemifentonia mandschurica* Oberth., *Dicranura ulmi tsvetaevi* Schintlmeister et Sviridov, *Nerice leechi* Staudinger)을 동정 하였으며, 이들을 포함한 재주나방科 주요 17種에 대한 분포와 분류학적 자료를 정리하였다. 또한 *Dicranura tsvetaevi* Schintlmeister et Sviridov의 생식기를 검경한 결과 이 종을 *D. ulmi* Dennis. et Schiffermüller의 아종으로 처리하였다.

검색어 : 나비목, 재주나방과, 한국, 분포, 신속, 신종

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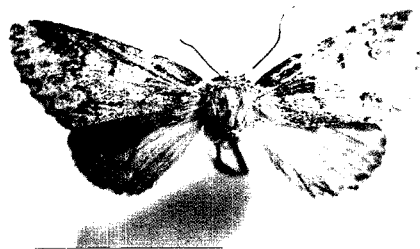
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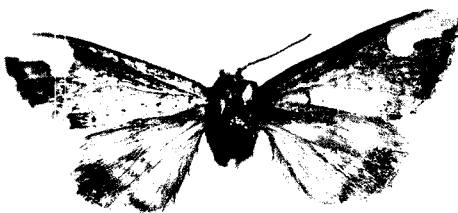
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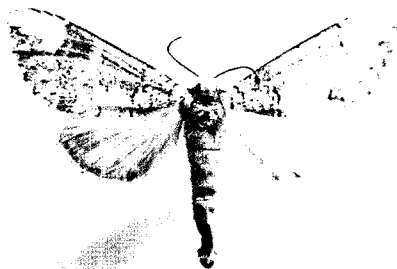
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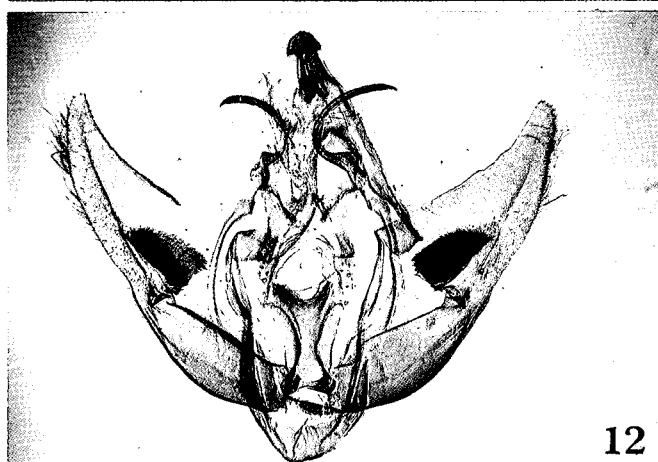
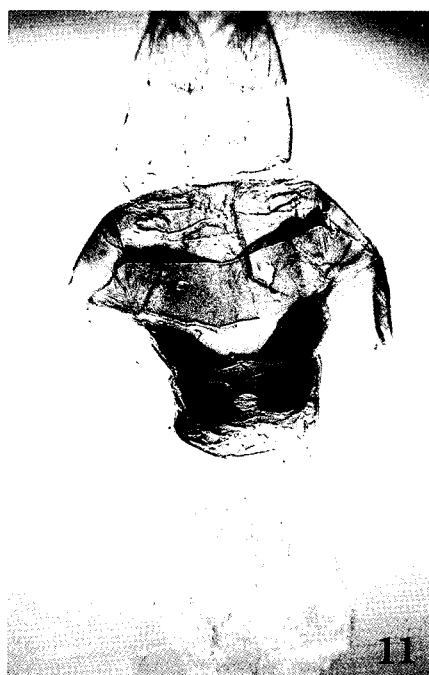
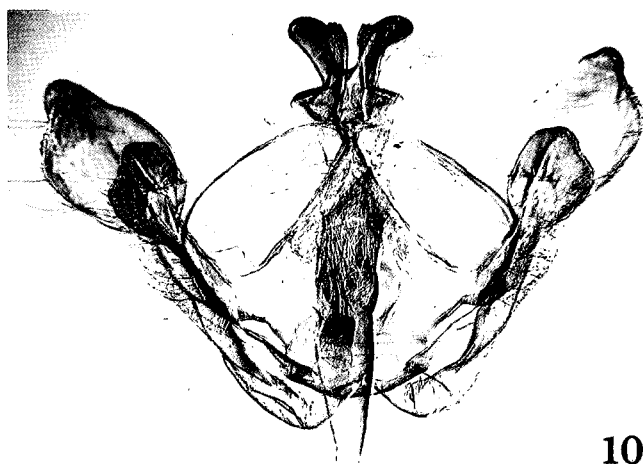


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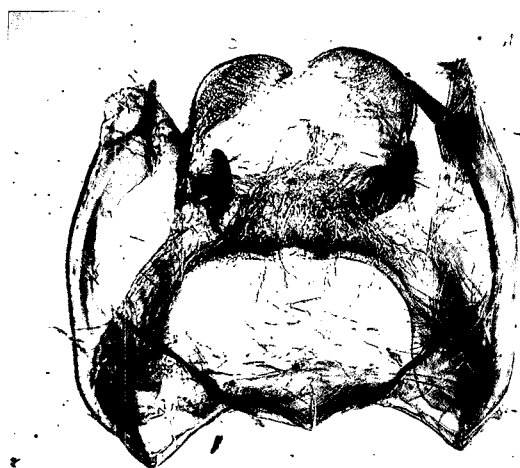


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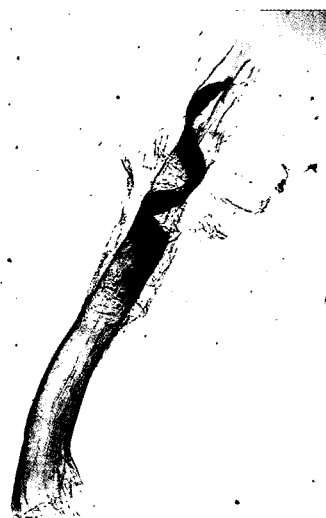
**Figs 2-9.** Adults : 2, ♂, *Lophontomira parki* sp. n.; 3, ♂, *Harpyia tokui* (Sugi); 4, ♂, *Drymonia japonica* (Wileman); 5, ♂, *Ptilophora jesoensis* (Matsumura); 6, ♂, *Dicranura ulmi tsvetaei* Schintlmeister et Sviridov; 7, ♂, *Neodrymonia Delia* (Leech); 8, ♂, *Phalera takasagoensis* Matsumura; 9, ♀, *Phalera minor* Nagano.



**Figs 10-15.** Male and female genitalia : 10, ♂, *Lophontosina parki* sp. n. with aedeagus; 11, ♀, *Phalera minor* Nagano; 12, ♂, *Dicranura ulmi tsvetaei* Schintlmeister et Sviridov; 13, ditto, aedeagus; 14, ♂, *Phalera takasagoensis* Matsumura; 15, ditto, aedeagus.



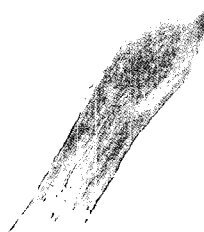
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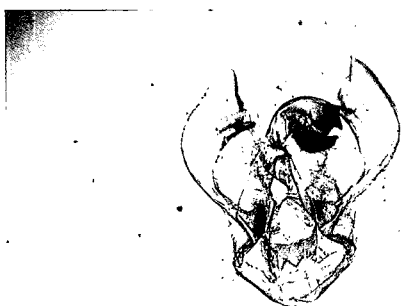
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**Figs 16-21.** Male genitalia : 16-17, ♂, *Harpyia tokui* (Sugi); 18-19, ♂, *Drymonia japonica* (Wileman); 20-21, ♂, *Ptilophora jesoensis* (Matsumura).